Docket No.: 566.43699X00

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Masayuki YAMAMOTO et al.
Serial No.:	10/806,099
Filed:	March 23, 2004
For:	CONFIGURATION MANAGEMENT APPARATUS AND METHOD
Group:	2188
Examiner:	M. Padmanabhan

PETITION TO MAKE SPECIAL
UNDER 37 CFR §1.102(MPEP §708.02)

June 6, 2005

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Applicants hereby petition the Commissioner to make the above-identified application special in accordance with 37 CFR §1.102(d). Pursuant to MPEP §708.02(VIII), Applicants state the following.

(A)   This Petition is accompanied by the fee set forth in 37 CFR §1.17(h). The Commissioner is hereby authorized to charge any additional payment due, or to credit any overpayment, to Deposit Account No. 50-1417.

(B) All claims are directed to a single invention. If the Office determines that all claims are not directed to a single invention, Applicant will make an election without traverse as a prerequisite to the grant of special status.

(C) A pre-examination search has been conducted.

The search was directed to the invention set forth in claims 1-20. The invention is directed, at a minimum, to a configuration management method in a computer system that includes a first storage device, a second storage device which becomes a migration destination of a logical volume of said first storage device, and a server which can transmit an access request to said first and second storage devices through a network, for setting up a configuration in said second storage device, comprising: a first step for obtaining a configuration including a logical volume definition, which is set up in said first storage device; a second step for preparing a logical volume definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, on the basis of a logical volume definition included in the configuration obtained in said first step; a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has; a fourth step for preparing a port bandwidth allocation definition of a port that said second storage device has, used for an access to a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration obtained in said first step, on the basis

2

of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a port that said second storage device has; and a fifth step for setting up the logical volume definition prepared in said second step, the cache allocation definition in case that the cache allocation definition is prepared in said third step, and the port bandwidth allocation definition in case that the port bandwidth allocation definition is prepared in said forth step, in said second storage device, as a configuration.

The search of the above features was conducted in the following areas: class 707, subclasses 200-204, class 709, subclass 201, class 711, subclass 100, 111-114, 118, 151-154, 161-165 and 170, and class 714, subclass 5-7.

Additionally, a computer database search was conducted on the USPTO system EAST.

(D) The following is a list of the references deemed most closely related to the subject matter encompassed by the claims:

U.S. Patent Number	Inventors
5,051,887	Berger et al.
5,784,703	Muraoka et al.
6,289,423	Ozaki et al.
6,775,739	Bachmat et al.

U.S. Patent Publication No.	Inventor(s)
2002/0138705	Suzuki et al.
2003/0221063	Eguchi et al.
2004/0024977	Delaney et al.
2004/0123029	Dalal et al.
2004/0193797	Krehbiel et al.
2005/0021908	Ohno et al.

A copy of each of these references (as well as other references uncovered during the search) is enclosed in an accompanying IDS.

(E) It is submitted that the present invention is patentable over the references for the following reasons.

It is submitted that the cited references, whether considered alone or in combination, fail to disclose or suggest the invention as claimed. In particular, the cited references, at a minimum, fail to disclose or suggest preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has, and/or preparing a port bandwidth allocation definition of a port that said second

storage device has, used for an access to a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration obtained in said first step, on the basis of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a port that said second storage device has, and/or preparing a cache allocation definition of a virtual volume of said virtualization device which virtualizes a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said virtualization device has, and/or preparing a port bandwidth allocation definition of a port that said virtualization device has, which is used for an access to a virtual volume of said virtualization device which virtualizes a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration which was obtained in said first step, on the basis of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a port that said virtualization device has.

All of the independent claims recite at least one of these features. In particular, independent claim 1 recites a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained

5

in said first step, on the basis of the cache allocation definition that said first

storage device has and capacity of a cache that said second storage device has,

and a fourth step for preparing a port bandwidth allocation definition of a port that

said second storage device has, used for an access to a logical volume of said

second storage device which becomes a migration destination of a logical

volume of said first storage device, in case that a port bandwidth allocation

definition is included in the configuration obtained in said first step, on the basis

of the port bandwidth allocation definition that said first storage device has and

bandwidth capacity of a port that said second storage device has. Independent

claim 5 recites preparing a cache allocation definition of a logical volume of said

second storage device which becomes a migration destination of a logical

volume of said first storage device, in case that a cache allocation amount of a

logical volume of said first storage device is smaller than remaining capacity to

which a logical volume is not allocated among total capacity of the cache that

said second storage device has, and prepares a port bandwidth allocation

definition of a port that said second storage device has, which is used for an

access to a logical volume of said second storage device which becomes a

migration destination of a logical volume of said first storage device, in case that

a port bandwidth allocation definition for an access to a logical volume of said

first storage device is smaller than bandwidth remaining capacity which is not

allocated to an access to a logical volume among total capacity of a port that said

second storage device has. Independent claim 6 recites a process which

prepares a cache allocation definition of a logical volume of said second storage

6

device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration stored in said storage subsystem, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has, and a process which prepares a port bandwidth allocation definition of a port that said second storage device has, which is used for an access to a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration stored in said storage subsystem, on the basis of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a port that said second storage device has.

Independent claim 9 recites a process which prepares a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration which was stored in said storage subsystem, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has, and a process which prepares a port bandwidth allocation definition of a port that said second storage device has, which is used for an access to a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration stored in said storage

7

subsystem, on the basis of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a port that said second storage device has. Independent claim 10 recites a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has, and a fourth step for preparing a port bandwidth allocation definition of a port that said second storage device has, which is used for an access to a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration which was obtained in said first step, on the basis of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a port that said second storage has.

Independent claim 11 recites a third step for preparing a cache allocation definition of a virtual volume of said virtualization device which virtualizes a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said virtualization device has, and a fourth step for preparing a port bandwidth allocation definition of a port that said virtualization device has, which is used for an access to a virtual volume of said virtualization device which

virtualizes a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration which was obtained in said first step, on the basis of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a port that said virtualization device has. Independent claim 16 recites a process which prepares a cache allocation definition of a virtual volume of said virtualization device which virtualizes a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration which was stored in said storage subsystem, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said virtualization device has, and a process which prepares a port bandwidth allocation definition of a port that said virtualization device has, which is used for an access to a virtual volume of said virtualization device which virtualizes a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration stored in said storage subsystem, on the basis of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a port that said virtualization device has.

Independent claim 19 recites a process which prepares a cache allocation definition of a virtual volume of said virtualization device which virtualizes a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration stored in said storage subsystem, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said virtualization device has, and a

9

process which prepares a port bandwidth allocation definition of a port that said virtualization device has, which is used for an access to a virtual volume of said virtualization device which virtualizes a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration which was stored in said storage subsystem, on the basis of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a port that said virtualization device has. Independent claim 20 recites a third step for preparing a cache allocation definition of a virtual volume of said virtualization device which virtualizes a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said virtualization device has, and a fourth step for preparing a port bandwidth allocation definition of a port that said virtualization device has, which is used for an access to a virtual volume of said virtualization device which virtualizes a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration which was obtained in said first step, on the basis of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a port that said virtualization device has.

The references considered most closely related to the claimed invention are briefly discussed below:

10

U.S. Patent 5,051,887 to Berger et al., discloses a method and system for managing data storage devices and the data stored on them. The invention relates to improvements in data storage devices for the input and output of information to a data processing system and, more particularly, to a dual copy function in a disk storage device. Each write to the primary storage device is also written to a secondary storage device. Tables are employed to manage the records to be updated and their locations on the physical medium. A status array is also employed to retain the status and device identification information on a status track of each of the data storage devices and another location to provide global identification and management of interchangeable data storage devices. The method comprises means for selecting two direct access storage devices as duplex-paired storage devices, a first one of the direct access storage devices being designated as a primary storage device and a second one of the direct access storage devices being designated as a secondary storage device, the primary and secondary storage devices being physically separated but substantially identical in configuration and type. (See, e.g., Abstract and column 2, lines 20-50.) However, unlike the present invention, Berger et al. do not disclose, at a minimum, a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has.

U.S. Patent 5,784,703 to Muraoka et al., discloses a storage array system having a plurality of physical storage devices from and into which data are read and written by a host system, comprising a physical system configuration information table which stores configuration information of the plurality of physical storage devices. The system includes a logical system configuration information table which stores configuration information of a plurality of logical storage subsystems in the case where the plurality of physical storage devices have been divided into the logical storage subsystems; and a division designation device which effects at least one of a number of designations in compliance with a command received from the host system. The designations include an n-equal-part designation in which a total storage capacity of the physical storage devices is equally divided in n (an integer of at least 2) for the n logical storage subsystems, a divisional allotment rate designation in which the total storage capacity is divided in accordance with a specified number for division and specified rates of capacities to be allotted to the respective logical storage subsystems, and a physical boundary division designation in which the total storage capacity is divided in accordance with positions for the division specified in physical storage unit. (See, e.g., Abstract and column 1, line 45, through column 2, line 49.) However, unlike the present invention, Muraoka et al. do not disclose, at a minimum, a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first

12

step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has.

U.S. Patent 6,289,423 to Ozaki et al., discloses a method and apparatus to control copying of a group of data stored in an original information-storing medium into a destination information-storing medium. The method includes a step of reading attribute information of a first zone storing the group of data, where the attribute information indicates whether the zone is a ROM area or a RAM area, and a step of copying the attribute information to a second zone to which the group of data is to be copied. The method further includes a step of copying the group of data stored in the first zone in the original information-storing medium to the second zone in the destination information-storing medium. (See, e.g., Abstract and column 2, line 62, through column 3, line 7.) However, unlike the present invention, Ozaki et al. do not disclose, at a minimum, a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has.

U.S. Patent 6,775,739 to Bachmat et al., discloses a mass storage system in which stored logical volumes are duplicated in mirrored form. The system includes a method for dynamically maximizing separation of the logical volumes by adjusting the mirror service policy for a disk drive system. Statistics

13

are periodically collected describing the reading and writing of data to mirrored logical volumes of the system in successive time periods and, from time to time, based upon the collected statistics, activity levels for the logical volumes are determined. A matching algorithm, weighted or unweighted, maximizes separation of the logical volumes and minimizes average physical drive seek times. In particular, the system takes into account activity levels at the physical devices and results in more efficient accessing of logical volume pairs as well as a better balance or loading of logical volumes. (See, e.g., Abstract and column 1, line 63, through column 2, line 58.) However, unlike the present invention, Bachmat et al. do not disclose, at a minimum, a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has.

U.S. Published Patent Application 2002/0138705 to Suzuki et al., discloses a data saving method, apparatus and computer program which operates in an information processing system including a first external storage device, a host device which performs data input and/or output operations to and/or from the first external storage device and a second external storage device. A connection is formed between the first external storage device and the second external storage device. The second external storage device is not connected to the host device. An operation is performed for automatically saving

14

data from the first external storage into the second external storage device via the connection formed between the first external storage device and the second external storage device. The saving is performed based on configuration information stored in the first external storage device. The configuration information includes information for designating an execution start time of saving data to the second external storage device, and at least one of a data storing area and a data set name in the second external storage device at which stored data is to be stored and information for indicating at least one type of second external storage device. (See, e.g., Abstract and paragraphs 5-7.) However, unlike the present invention, Suzuki et al. do not disclose, at a minimum, a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has.

U.S. Published Patent Application 2003/0221063 to Eguchi et al., discloses a storage subsystem that detects the necessity of the data relocation and determines whether the data relocation is possible or not from one storage unit to another within the particular storage subsystem. A virtualization device is notified in the case where the data relocation in the particular subsystem is impossible. The manager of the virtualization device gives an inquiry to the storage subsystems as to whether any one of them can become a relocation

destination or not. A storage subsystem determines, based on the related information, whether the data relocation requested is possible or not within the particular storage subsystem. In the case where such relocation is possible, the copying process is carried out for data relocation from one storage subsystem to another in compliance with an instruction from the virtualization device. The data relocation method for a computer system including a host computer, a plurality of storage subsystems each having a plurality of storage units, and a data relocation management unit for managing the data relocation between the storage subsystems, comprises the steps of: determining whether the data relocation from one storage unit to another within one of the storage subsystems which constitutes a relocation source, based on the performance information and the utilization information of the particular one of the storage subsystems; determining whether the data relocation is possible or not to a storage unit within another one of the storage subsystems through the data relocation management unit in the case where the data relocation is impossible within the storage subsystem constituting the relocation source; and copying the data to the particular one storage subsystem constituting a relocation destination from the storage subsystem constituting the relocation source through the data relocation management unit in the case where the data relocation to the particular another storage subsystem is possible. (See, e.g., Abstract and paragraphs 18-21.) However, unlike the present invention, Eguchi et al. do not disclose, at a minimum, a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of

16

a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has.

U.S. Published Patent Application 2004/0024977 to Delaney et al., discloses a method and system for copying and/or transferring stored data of one storage volume of a storage system to another storage volume while enabling requests to the storage volumes. The system and method is particularly useful in RAID storage systems. One system includes a detector configured for detecting an amount of the stored data copied from the one storage volume to the other storage volume based on a boundary marker of the storage volumes. The boundary marker may indicate an amount of the stored data copied from the one storage volume to the other storage volume. A processor is communicatively connected to the detector for processing requests to the storage volumes according to rules based on the boundary marker. A file generator may generate a log file of the requests. The log file may be stored in the other storage volume thereby minimizing a need for external storage devices. (See, e.g., Abstract and paragraphs 12-15.) However, unlike the present invention, Delaney et al. do not disclose, at a minimum, a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and

capacity of a cache that said second storage device has.

U.S. Published Patent Application 2004/0123029 to Dalal et al.,

discloses a method and system for preserving the intent of a logical volume

creator with the logical volume. The creator of a logical volume defines certain

characteristics of that logical volume, such as a number of copies of data to be

maintained, a level of performance required of the logical volume, or a

requirement that one or more snapshots of the logical volume can be preserved

representing the data at different points in time. In response to the user's

requirements, the system explores the possibilities for providing the

characteristics in the existing storage environment. The system then implements

the logical volume and stores the intent, along with a corresponding set of rules

for configuring the logical volume, with the logical volume. As a result, volume

management operations like resizing the volume and evacuating data from the

volume use the rules to preserve the intent of the creator. By ensuring that the

logical volume consistently conforms to rules fulfilling the original intent, a

consistent level of availability of the logical volume can be achieved to fulfill

contractual availability requirements for storage service level agreements. (See,

e.g., Abstract and paragraph 46.) However, unlike the present invention, Dalal et

al. do not disclose, at a minimum, a third step for preparing a cache allocation

definition of a logical volume of said second storage device which becomes a

migration destination of a logical volume of said first storage device, in case that

a cache allocation definition is included in the configuration obtained in said first

step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has.

U.S. Published Patent Application 2004/0193797 to Krehbiel et al., discloses a method and structure for storing volume and other configuration information on all disk drives of a volume group and for performing pre-merge operations to inform a user of the pending availability of the identified volumes. The invention also discloses a method and system for performing the merge operations and to store all configuration area data in a single data area of the disk drives. More specifically, all configuration information may be stored in the so-called other data area of the configuration information. Insertion of a first disk drive of a volume group may initiate a pre-merge operation by gathering all required information associated with volumes and pseudo volumes of the volume group being inserted. The data so gathered in the pre-merge operation may be presented to the user in advance of insertion of the last drive of a new volume group. Although the pre-merge information may be presented to a user, the user may be precluded from selecting importation of volumes in the newly inserted volume group until all drives of the volume group are inserted into the array storage subsystem. (See, e.g., Abstract and paragraphs 17 - 20.) However, unlike the present invention, Krehbiel et al. do not disclose, at a minimum, a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation

definition that said first storage device has and capacity of a cache that said second storage device has.

U.S. Published Patent Application 2005/0021908 to Ohno et al., discloses a storage system in which, a storage device such as a disk array subsystem and a host computer are connected via a communication network and a setting method for storage configuration information. Pairs are formed from a plurality of dispersed volumes and copying between the volumes is conducted by a series of remote operations from a management server. A management server instructs the generation of configuration setting files to host computers selected so as to form copy pairs. If the configuration setting files are generated by host agents, the management server instructs copy start to a host computer having a primary volume. The host agent generates a prescribed command via a copy pair control module and causes a storage subsystem to execute copying between the volumes. When copying is completed, the management server acquires the newest storage configuration information from the storage subsystem and updates configuration information. One embodiment of the invention provides a storage system comprising a host computer, at least one storage device for providing a memory device to the host computer, and a management computer for managing the storage device, where the management computer comprises means for acquiring in advance from the host computer storage configuration information that the host computer has and change notification means for generating change information for changing the storage configuration information that was acquired in advance and posting it to the host

20

computer, and the host computer comprises means for instructing a change of configuration to the storage device based on the change information posted from the management computer. (See, e.g., Abstract and paragraphs 8-15.) However, unlike the present invention, Ohno et al. do not disclose, at a minimum, a third step for preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has.

Therefore, since the references fail to disclose preparing a cache allocation definition of a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said second storage device has, and/or preparing a port bandwidth allocation definition of a port that said second storage device has, used for an access to a logical volume of said second storage device which becomes a migration destination of a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration obtained in said first step, on the basis of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a

port that said second storage device has, and/or preparing a cache allocation definition of a virtual volume of said virtualization device which virtualizes a logical volume of said first storage device, in case that a cache allocation definition is included in the configuration obtained in said first step, on the basis of the cache allocation definition that said first storage device has and capacity of a cache that said virtualization device has, and/or preparing a port bandwidth allocation definition of a port that said virtualization device has, which is used for an access to a virtual volume of said virtualization device which virtualizes a logical volume of said first storage device, in case that a port bandwidth allocation definition is included in the configuration which was obtained in said first step, on the basis of the port bandwidth allocation definition that said first storage device has and bandwidth capacity of a port that said virtualization device has, it is submitted that all of the claims are patentable over the cited references.

CONCLUSION

Applicant has conducted what it believes to be a reasonable search, but makes no representation that "better" or more relevant prior art does not exist. The Patent Office is urged to conduct its own complete search of the prior art, and to thoroughly examine this application in view of the prior art cited herein and any other prior art that the Patent Office may locate in its own independent search. Further, while Applicant has identified in good faith certain portions of each of the references listed herein in order to provide the requisite detailed discussion of how the claimed subject matter is patentable over the references,

the Patent Office should not limit its review to the identified portions but rather, is urged to review and consider the entirety of each reference, and not to rely solely on the identified portions when examining this application.

In view of the foregoing, Applicant requests that this Petition to Make Special be granted and that the application undergo the accelerated examination procedure set forth in MPEP 708.02 VIII.
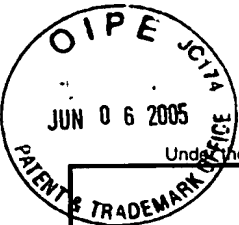
Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.

Frederick D. Bailey
Registration No. 42,282

FDB/sdb
(703) 684-1120

PETITION FEE
Under 37 CFR 1.17(f), (g) & (h)
TRANSMITTAL
(Fees are subject to annual revision)

Send completed form to: Commissioner for Patents
P.O. Box 1450, Alexandria, VA 22313-1450

Application Number	**10/806,099**
Filing Date	**March 23, 2004**
First Named Inventor	**Masayuki YAMAMOTO et al.**
Art Unit	**2188**
Examiner Name	**M. Padmanabhan**
Attorney Docket Number	**566.43699X00**

Enclosed is a petition filed under 37 CFR 1.102(d) that requires a processing fee (37 CFR 1.17(f), (g), or (h)). Payment of $ 130.00 is enclosed.

This form should be included with the above-mentioned petition and faxed or mailed to the Office using the appropriate Mail Stop (e.g., Mail Stop Petition), if applicable. For transmittal of processing fees under 37 CFR 1.17(i), see form PTO/SB/17i.

Payment of Fees (small entity amounts are NOT available for the petition (fees)

☒ The Commissioner is hereby authorized to charge the following fees to Deposit Account No. <u>50-1417:</u>

☐ petition fee under 37 CFR 1.17(f), (g) or (h)   ☒ any deficiency of fees and credit of any overpayments
Enclose a duplicative copy of this form for fee processing.

☐ Check in the amount of $ _____ is enclosed.

☒ Payment by credit card (From PTO-2038 or equivalent enclosed). Do not provide credit card information on this form.

Petition Fees under 37 CFR 1.17(f):   **Fee $400**   **Fee Code 1462**
For petitions filed under:
§ 1.53(e) - to accord a filing date.
§ 1.57(a) - to according a filing date.
§ 1.182 – for decision on a question not specifically provided for.
§ 1.183 – to suspend the rules.
§ 1.378(e) for reconsideration of decision on petition refusing to accept delayed payment of maintenance fee in an expired patent.
§ 1.741(b) – to accord a filing date to an application under §1.740 for extension of a patent term.

Petition Fees under 37 CFR 1.17(g):   **Fee $200**   **Fee code 1463**
For petitions filed under:
§1.12 - for access to an assignment record.
§1.14 - for access to an application.
§1.47 - for filing by other than all the inventors or a person not the inventor.
§1.59 - for expungement of information.
§1.103(a) - to suspend action in an application.
§1.136(b) - for review of a request for extension of time when the provisions of section 1.136(a) are not available.
§1.295 - for review of refusal to publish a statutory invention registration.
§1.296 - to withdraw a request for publication of a statutory invention registration filed on or after the date the notice of intent to publish issued.
§1.377 – for review of decision refusing to accept and record payment of a maintenance fee filed prior to expiration of a patent.
§1.550(c) – for patent owner requests for extension of time in <u>ex parte</u> reexamination proceedings.
§1.956 – for patent owner requests for extension of time in <u>inter partes</u> reexamination proceedings.
§ 5.12 – for expedited handling of a foreign filing license.
§ 5.15 – for changing the scope of a license.
§ 5.25 – for retroactive license.

Petition Fees under 37 CFR 1.17(h):   **Fee $130**   **Fee Code 1464**
For petitions filed under:
§1.19(g) – to request documents in a form other than that provided in this part.
§1.84 – for accepting color drawings or photographs.
§1.91 – for entry of a model or exhibit.
§1.102(d) – to make an application special.
§1.138(c) – to expressly abandon an application to avoid publication.
§1.313 – to withdraw an application from issue.
§1.314 – to defer issuance of a patent.

Name (Print/Type)	**Frederick D. Bailey**	*Registration No. (Attorney/Agent)*	**42,282**
Signature		*Date*	**June 6, 2005**